IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended): A relay apparatus for a terminal or a server on a private network that does not have an address on a global network to perform communication through the global network, comprising:

a WAN interface unit which provides communication with the global network;

a LAN interface unit which provides communication with the private network;

an access control unit having means for controlling access from the global network to the private network in accordance with an access control rule which is established on a per sending device basis or on a per sending network basis;

an address translation unit ~~having:~~ including,

means for translating an address in accordance with an address translation rule ~~established on a per sending device basis~~, in order to ~~transferring~~ transfer information from a terminal on the global network to a terminal on the private network, [[;]] and

means for translating an address in accordance with ~~an address translation~~ a rule established on a per sending device basis, in order to ~~transferring~~ transfer information from a terminal on the private network to a terminal on the global network; and

a database unit which records the access control rule and the address translation rule, wherein

the address translation rule associates a sending device and destination on the global network with a destination on the private network, and

if a sending device and destination of the packet received at the WAN interface unit matches the sending device and destination on the global network of the address translation rule, the address translation unit translates the destination of the packet to the destination on the private network.

2. (Currently Amended): The relay apparatus according to Claim 1, comprising:

an authentication unit which performs authentication in response to a request for access permission sent from a terminal on the global network, wherein:

the database unit further records user information used by the authentication unit to perform authentication;

wherein the access control unit further ~~has:~~ includes,

means for adding an access control rule established on a per sending device basis or a per sending network basis to the database unit if the authentication succeeds, [[;]] and

means for deleting the added access control rule from the database unit when a predetermined criterion for ending communication is satisfied; and

the address translation unit further ~~has:~~ includes,

means for adding an address translation rule which sets the terminal on the global network as the sending device ~~established on a per sending device basis~~ to the database unit if the authentication succeeds, [[;]] and

means for deleting the added address translation rule from the database unit when a predetermined criterion for ending communication is satisfied.

3. (Currently Amended): The relay apparatus according to Claim 1, wherein:

the access control unit further ~~has:~~ includes,

means for adding an access control rule established on a per sending device basis or on a per sending network basis to the database unit in response to a request from an authentication sever which performs authentication of a terminal on the global network, [[;]] and

means for deleting the added access control rule from the database unit when a predetermined criterion for ending communication is satisfied; and

the address translation unit further ~~has:~~ includes,

means for adding an address translation rule which sets the terminal on the global network as the sending device ~~established on a per sending device basis~~ to the database unit in response to a request from the authentication server, [[;]] and

means for deleting the added address translation rule from the database unit when a predetermined criterion for ending communication is satisfied.

4. (Currently Amended): An authentication server which permits access to the relay apparatus according to Claim 3, comprising:

an interface unit which provides communication with a terminal on the global network and the relay apparatus;

an authentication unit which performs authentication in response to a request for permission to access the relay apparatus from a terminal on the global network;

a control unit ~~having:~~ including,

means for requesting the relay apparatus to add an access control rule and an address translation rule which sets the terminal on the global network as the sending device for a packet from [[a]] the terminal on the global network if authentication at the authentication unit succeeds, [[;]] and

means for requesting the relay apparatus to delete the added access control rule and address translation rule when a predetermined criterion for ending communication is satisfied; and

a database unit which records information associating user information used by the authentication unit to perform authentication with an access control rule and address translation rule requested to be added.

5. (Currently Amended): The relay apparatus according to Claim 1, wherein:

the access control unit further ~~has:~~ includes,

means for adding an access control rule established on a per sending device basis to the database unit in response to a request for initiating communication from a terminal on a private network, [[;]] and

means for deleting the added access control rule from the database unit when a predetermined criterion for ending communication is satisfied; and

the address translation unit further ~~has:~~ includes,

means for adding ~~an address translation~~ a rule established on a per sending device basis to the database unit in response to a request for initiating communication from a terminal on the private network, [[;]] and

means for deleting the added ~~address translation~~ rule from the database unit when a predetermined criterion for ending communication is satisfied.

6. (Currently Amended): An address translation apparatus for a terminal or a server on a private network that does not have an address on a global network to perform communication through the global network, comprising:

a WAN interface unit which provides communication with the global network;

a LAN interface unit which provides communication with the private network;

an address translation unit ~~having:~~ including,

means for translating an address in accordance with an address translation rule ~~established on a per sending device basis~~, in order to ~~transferring~~ transfer information from a terminal on the global network to a terminal on the private network, [[;]] and

means for translating an address in accordance with ~~an address translation~~ a rule established on a per sending device basis, in order to ~~transferring~~ transfer information from a terminal on the private network to a terminal on the global network; and

a database unit for recording the address translation ~~rules~~ rule, wherein

the address translation rule associates a sending device and destination on the global network with a destination on the private network, and

if a sending device and destination of the packet received at the WAN interface unit matches the sending device and destination on the global network of the address translation rule, the address translation unit translates the destination of the packet to the destination on the private network.

7. (Currently Amended): The address translation apparatus according to Claim 6, wherein

the address translation unit further ~~has:~~ includes,

means for adding an address translation rule which sets the terminal on the global network as the sending device ~~established on a per sending device basis~~ to the database unit in response to a request for initiating communication sent from a terminal on the global network, ~~or a terminal on a private network; and~~

means for deleting the added address translation rule from the database unit when a predetermined criterion for ending communication is satisfied,

means for adding a rule established on a per sending device basis to the database unit in response to a request for initiating communication sent from a terminal on the private network, and

means for deleting the added rule from the database unit when a predetermined criterion for ending communication is satisfied.

8. (Currently Amended): The address translation apparatus according to Claim 7, comprising:

an authentication unit which performs authentication in response to a request for initiating communication from a terminal on the global network, wherein:

the database unites further records user information used by the authentication unit to perform authentication, [[;]] and

the address translation unit adds the address translation rule which sets the terminal on the global network as the sending device to the database unit in response to a request for initiating communication from a terminal on the global network only if the authentication succeeds.

9. (Currently Amended): The address translation apparatus according to Claim 7, wherein the address translation unit adds the address translation rule which sets the terminal on the global network as the sending device to the database unit in response to a request for initiating communication from a terminal on the global network only if an authentication server which performs authentication requests the addition.

10. (Currently Amended): An authentication server which permits access to the address translation apparatus according to Claim 9, comprising:

an interface unit which provides communication with a terminal on the global network and the address translation apparatus;

an authentication unit which performs authentication in response to a request for permission to access the address translation apparatus from a terminal on the global network;

a control unit ~~having:~~ including,

means for requesting the address translation apparatus to add an address translation rule which sets the terminal on the global network as the sending device ~~for a packet sent from a terminal on the global network~~ if authentication at the authentication unit succeeds, [[;]] and

means for requesting the address translation apparatus to delete the added address translation rule when a predetermined criterion for ending communication is satisfied; and

a database unit which records user information used by the authentication unit to perform authentication.

11-14. (Canceled).

15. (Currently Amended): The relay apparatus according to Claim 1, ~~comprising:~~ wherein

the access control rule and the address translation rule have a condition with the IP address of the sending device or the IP address of the sending network.

16. (Currently Amended): The relay apparatus according to Claim 15, comprising:

an authentication unit which performs authentication in response to a request for access permission sent from a terminal on the global network, wherein:

the database unit further records user information used by the authentication unit to perform authentication;

the access control unit further ~~has:~~ includes,

means for adding an access control rule established on a per sending device basis or a per sending network basis to the database unit if the authentication succeeds, [[;]] and

means for deleting the added access control rule from the database unit when a predetermined criterion for ending communication is satisfied; and

the address translation unit further ~~has:~~ includes,

means for adding an address translation rule which sets the terminal on the global network as the sending device ~~established on a per sending device basis~~ to the database unit if the authentication succeeds, [[;]] and

means for deleting the added address translation rule from the database unit when a predetermined criterion for ending communication is satisfied.

17. (Currently Amended): The address translation apparatus according to Claim 6, ~~comprising:~~ wherein

the address translation rule has a condition with the IP address of the sending device or the IP address of the sending network.

18. (Currently Amended): The address translation apparatus according to Claim 17, wherein

the address translation unit further ~~has:~~ includes,

means for adding an address translation rule which sets the terminal on the global network as the sending device ~~established on a per sending device basis~~ to the database unit in response to a request for initiating communication sent from a terminal on the global network, ~~or a terminal on a private network; and~~

means for deleting the added address translation rule from the database unit when a predetermined criterion for ending communication is satisfied,

means for adding a rule established on a per sending device basis to the database unit in response to a request for initiating communication sent from a terminal on a private network, and

means for deleting the added rule from the database unit when a predetermined criterion for ending communication is satisfied.

19-20. (Canceled).

21. (Currently Amended): An address translation method for a terminal on a private network that does not have an address on a global network to perform communication through the global network, comprising:

recording an address translation rule associating a sending device and destination on the global network with a destination on the private network ~~established on a par sending device basis~~ in a database unit beforehand;

when a packet from the global network is received by a WAN interface unit,

translating, by an address translation unit, a destination of the packet to the destination on the private network, if the sending device and destination of the packet received at the WAN interface unit matches the sending device and destination on the global network of ~~address in accordance with~~ the address translation rule, [[;]] and

transferring, by a LAN interface unit, the packet having the translated address to the private network;

when a packet from the private network is received by a LAN interface unit,

translating, by the address translation unit, a source address in accordance with the ~~address translation~~ rule established on a per sending device basis; and

transferring, by the WAN interface unit, the packet having the translated address to the global network.

22. (Currently Amended): An address translation method for a terminal on a private network that does not have an address on a global network to perform communication through the global network, comprising:

recording an address translation rule associating a sending device and destination on the global network with a destination on the private network ~~established on a per sending device basis~~ in a database unit beforehand;

when a packet from the global network is received by a WAN interface unit,

performing authentication in an authentication unit, [[and;]]

if the authentication succeeds, checking, by the address translation unit, the database unit to see whether or not an address translation rule ~~that~~ whose sending device and destination on the global network matches a sending device ~~source information~~ and destination ~~information~~ of the packet is stored in the database unit, [[and]]

if a matching address translation rule is found in the database unit, translating the ~~address~~ destination of the packet to the destination on the private network in accordance with the address translation rule, and[[;]]

if a matching address translation rule is not found in the database unit, adding an address translation rule to the database unit and translating the destination ~~address~~ of the packet to the destination on the private network in accordance with the added address translation rule; and

transferring, by a LAN interface unit, the packet having the translated address to the private network;

when a packet from the private network is received by the LAN interface unit, [[;]]

checking, by the address translation unit, the database unit to see whether or not an address translation rule ~~that~~ whose destination on the private network matches the sending

device ~~source information and destination information~~ of the packet is stored ~~recorded~~ in the database unit, and

if a matching address translation rule is found in the database unit, translating the ~~address~~ sending device of the packet to an address on the global network of the WAN interface in accordance with the address translation rule, [[;]]

if a matching address translation rule is not found in the database unit, adding an address translation rule to the database unit and translating the sending device ~~address~~ of the packet to an address on the global network of the WAN interface in accordance with the added address translation rule; ~~and~~

transferring by the WAN interface unit the packet having the translated address to the global network; and

if there is an address translation rule added by the address translation unit, deleting the address translation rule from the database unit when a predetermined criterion for ending communication is satisfied.

23. (Original): The address translation method according to Claim 22, wherein, instead of performing authentication in the authentication unit, determination is made that authentication is successful when a request is received from an authentication server which performs authentication of a terminal on the global network.

24-28. (Canceled)

29. (New): An address translation apparatus for a terminal or a server on a private network that does not have an address on a global network to perform communication through the global network, comprising:

a WAN interface unit which provides communication with the global network;

a LAN interface unit which provides communication with the private network;

an address translation unit which translates an address in accordance with an address translation rule, in order to transfer information from a terminal on the global network to a terminal on the private network, and which translates an address in accordance with a rule established on a per sending device basis, in order to transfer information from a terminal on the private network to a terminal on the global network; and

a database unit which records the address translation rule and the rule, wherein

the address translation rule associates a sending device and destination on the global network with a destination on the private network, and

if a sending device and destination of the packet received at the WAN interface unit matches the sending device and destination on the global network of the address translation rule, the address translation unit translates the destination of the packet to the destination on the private network.